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William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, NW  
Washington, DC 20554

Re: CC Docket No. 92-297, RM-7872, RM-7722  
Ex Parte Presentation

Dear Mr. Caton:

Edward J. Fitzpatrick of Hughes Communications Galaxy, Inc. and the undersigned representative of Hughes Communications Galaxy, Inc. met on March 14, 1996 with Commission representative Lisa Smith to discuss band segmentation proposals for the 28 GHz band. The enclosed materials were distributed to Ms. Smith.

An original and two copies of this letter are enclosed.

Respectfully submitted,

John P. Janka

Enclosures

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# 28 GHz BAND PLAN OPTIONS

# Proceeding Overview

## **GSO FSS is an established service**

- 28 GHz is the next growth band

## **GSO FSS 28 GHz spectrum requirements in the US have remained constant (1000 MHz)**

## **Other services have expanded their stated needs**

- LMDS now requires separated return links
- LMDS has reneged on Neg Reg sharing agreement
- Iridium has expanded from 100 to 200 MHz
- Odyssey has expanded from 100 to 300 MHz
- Teledesic has expanded from 400 to 500 MHz (standard terminals)

# **Option 4 Is Inequitable**

**GSOs have solved the NGSO MSS sharing issue**

**Option 4 spectrum reduction places burden of LMDS  
return link problem on GSOs**

- **Lost capacity**
- **Smaller market**
- **System redesign**
- **Lost market opportunity from schedule delay**
- **Increased system cost**

**Inadequate bandwidth jeopardizes viability of mass  
market 28 GHz GSO FSS in the US**

# Option 4 Is Inequitable

## **GSOs have been asked to bear numerous burdens under any band plan**

- **constraints from sharing with NGSO MSS feeder links**
  - performance and capacity losses
  - design limitations (current and future systems)
- **non-standard downlink pairing**
- **non-contiguous spectrum**
- **LMDS grandfathering**
- **restrictive space science power limits**

## **GSOs have most extensive sharing**

- **with each other (2 degree spacing)**
- **with NGSO MSS feeder links**

# **Other Alternatives Must Be Pursued**



**Original Band Plan (NPRM July 1995) is acceptable with minor adjustments**

- **Hughes/TRW sharing principles resolve issue in 250 MHz of shared spectrum**
- **GSOs and Iridium must avoid spectrum overlap**

**Options 1, 2, 2A, 2B and 5 are viable**

**Options 3 and 4 are unacceptable**

- **significant GSO bandwidth constraints**

**Some adjustments by other services may be required**

# Extraterritorial Extension



**Hughes supports “market solution” to international 28 GHz issues**

**Restricting US GSO operations in 400 MHz internationally biases market access in favor of NGSO**

**Regulations should not shackle GSO FSS to advantage of NGSO FSS**

- reciprocal treatment required
- flexibility needed to respond to future changes in band usage

**Band plan should be only a domestic solution**

# Summary

**GSOs have agreed to numerous concessions in order to develop a compromise band plan**

**GSO spectrum needs have remained constant while other services have expanded their needs**

**GSOs should not be asked to bear additional pain to solve the LMDS return link problem**

**Options 3 and 4 are “non-starters” for GSOs in the US**

**Option 5 is the best solution in the US for all parties**

- **provides requested amount of spectrum to all services**
- **only a minor adjustment to July 1995 NPRM proposal**
- **LMDS burden is less than GSOs have been asked to bear**
- **most consistent with WRC-95**